DOE/HRE-ID-349

DOE READING ROOM
DOCUMENT TO BE RELEASED

T070704

1. Location of Reading Room:
Idaho Operations Public Reading Room
1776 Science Center Dr. University Place
Idaho Falls, ID 83403

2. Expected Release Date:
May 30, 1995

3. Document Type:

[ ] Letter
[ ] Memorandum
[ ] Report
[ ] Publication
[X] Other (Specify)
Press Release:
Subject: INFORMATION FOR PRESS AND RADIO NO. 659 REGARDING BORAX-I EXPERIMENT DATED

a. If letter or memo:
To:
From:
Subject:

b. If report:
Title:

4. Document Date:
Aug. 10, 1955

c. If publication:
Name:
Volume:
Issue:

5. Summary (2-3 lines indicating the major subject(s) of the document): Information for press and radio No. 659 in connection with a test to destruction of a nuclear reactor known as Borax I at the National Reactor Testing Station.

6. Name and telephone number of person completing form:	7. Organization:	8. Date:
Thomas L. Baccus (208) 525-0696	Lockheed Idaho Technologies Co.	May 19, 1995

[ ] Check here if a copy of the document is being sent to Headquarters.

HUMAN RADIATION EXPERIMENTS

RECORDS PROVENANCE FORM

REPOSITORY NAME	INEL
COLLECTION NAME	ASSURANCE DIVISION - REFERENCE MATERIALS, PUBLICATIONS, AND PROCEDURE MANUALS
BOX NUMBER	LATERAL FILE CABINET, 3rd DRAWER
ADDITIONAL LOCATION INFORMATION	DOE ID NORTH ROOM 179 FOLDER: UNTITLED FILE ON BORAX-I
FILE TITLE	INFORMATION FOR PRESS AND RADIO NO. 659 REGARDING BORAX-I EXPERIMENT DATED AUGUST 10, 1955
TOTAL PAGES	
BATE NUMBER RANGE	
DOCUMENT NUMBER RANGE	

HEI FORM DOCUMENT NO.: T070126
DOCUMENT NO.: T070704
DOCUMENT TITLE: INFORMATION FOR PRESS AND RADIO NO. 659 REGARDING BORAX-I EXPERIMENT DATED AUGUST 10, 1955
CROSS REFERENCES:
ITEMS OF INTEREST:

Percy Griffiths

U. S. ATOMIC ENERGY COMMISSION
IDAHO OPERATIONS OFFICE
IDAHO FALLS, IDAHO

INFORMATION FOR PRESS AND RADIO
No. 659
Telephone 2900, Extension 217

ADVANCE
For use after 7:30 A.M., MST
Wednesday, August 10, 1955

PLEASE GUARD AGAINST PREMATURE RELEASE

Precautions taken to prevent danger to personnel in connection with a test to destruction of a nuclear reactor known as Borax I at the National Reactor Testing Station are described in proceedings of the International Conference on Peaceful Uses of Atomic Energy in Geneva, Switzerland.

The description is contained in a paper prepared for the conference by Percy Griffiths, Claude W. Sill and Mack Wilhelmsen, members of the Health and Safety Division, Idaho Operations Office, U. S. Atomic Energy Commission.

On July 22, 1954, the temporary reactor, subject of more than two hundred safety experiments by Argonne National Laboratory, was sacrificed in an experiment violent enough to melt the fuel plates. Before the experiment, the paper explains, "all precautions had been taken to minimize any resultant hazard. Five mobile radiation-monitoring teams were based around the reactor area at distances greater than 800 meters. Highway barricades were readied for closure of traveled roads should the necessity arise. All operational and observational personnel were based at the

control area, a distance of 800 meters from the reactor. In addition, all travel had been restricted within this distance."

After describing monitoring activities immediately following the experiment, the report notes that, "Within the first hour it was established that there was no radiation hazard to anyone outside the 800 meter perimeter as a result of the experiment."

Activity then was directed toward establishing safe time limits for the purpose of making inspections and for removing photographic film from the reactor area before it became overexposed from the high level of radiation present. Investigation showed that the south side of the reactor area, which contained reactor fragments, had a high radiation level, but that entry to the reactor area proper could be accomplished from the east side, permitting removal of film and initial inspections. Five days after the experiment radiation levels had decreased sufficiently to permit commencement of salvage and decontamination.

Later, the contaminated area was covered with a layer of gravel to reduce the radiation level.

In summary, the paper notes: "Because the reactor was remotely operated with an established safety distance of 800 meters, no hazard to operating personnel or to others at the testing station was present. The entire experiment was accomplished with no radiation exposure to personnel above permissible levels."

#